Since the mancar has no independent means of stopping, it is axiomatic that it cannot comply with the regulation unless it is attached to the brakecar. The issue herein, however, is does the regulatory standard require a downslope mancar to be a permanent fixture on the brakecar in order to have the brakes on the brakecar satisfy the regulatory requirement for the mancar. It is not disputed herein that the brakes on the brakecar would stop both cars fully loaded should there be a hoist rope break or other overspeed condition, as long as the two cars remained attached. In fact, the preferred method of abatement of this citation is to simply reverse the order of the cars, putting the brakecar on the down-slope end. In that configuration per MSHA, the mancar would not require an independent braking system, but rather the brakes on the brakecar would suffice to handle the braking for both cars.

I conclude that the regulation does not require a permanent brakecar-mancar attachment. On the contrary, I conclude that if these two cars are sufficiently tied together, they are in fact operating as a single device used to transport persons in a slope and that device (i.e., the mantrip) is equipped with an adequate automatic braking system capable of stopping both cars in an emergency (such as a hoist rope break).

Therefore, the ultimate issue is the adequacy of the attachment between the mancar and the brakecar since everyone appears to agree that so long as the mancar remains coupled to the brakecar there is no hazard under any conceivable emergency situation. The possibility of brakecarmancar uncoupling is the hazard the Secretary is concerned with.

The only empirical data or scientific evidence concerning the strength of the coupling assembly between the two cars, including the safety chains, came from the contestant and I find such evidence to be credible. The gist of that evidence was that the coupling assembly can withstand many times the maximum fully loaded weight of the mancar. Likewise, the safety chains in the event that the principal coupling did break would be sufficient, by a safety factor of at least 8 (eight), to keep the mancar attached to the brakecar. This evidence was unrebutted. Also unrebutted was the fact that Rushton has 13 years experience operating this mantrip in that configuration without experiencing any separation of the cars or any other problem associated with the coupling or safety chains.

In his brief, the Secretary states that "[T]here is still a possibility that the connection between the [mancar]